

Charleston 3 May 1858

My dear Sir,

Your letter of 3 Feb and 9 April have both been received; the former a pretty good substitute for a "cut and-start", although it somewhat belied its real magnitude, appearing like 8 pages, but proved to be only 4!; the latter proving that "poor human nature", like other "less respectable" natures will return to its early habits. However I have no right to complain as it was on your own business.

Our Palmetto fruits pretty freely, apparently, but I cannot say whether the fruit is always perfected, or will germinate readily. I can collect, or have collected, without difficulty, in the proper season, but I fear it is now too late. Palmetto growing is a slow business. I have young plants in my herbarium of $2\frac{1}{2}$ years growth and they are not more than three times that number in height from the bottom of the root to the top of the leaf. I presume you mean by Palmetto, the large species, we have two others, C. serrulata, and Sabal adansonii, which grow freely in certain soils and localities, and fruit freely also; do you want these? Do you know anything of Frase's Chamaepsis Hystrix? I have sought and enquired for it in vain between this city and Savannah; not such thing is known, nor have I heard of it in Florida yet.

Sophia sagittifolia I can get for you, I know of but one locality for it, around Georgetown &c. I got leaves last year at the time wrote you from Georgetown but the flowers were not then out; I have written for flowers already.

Your aristocratic is not an average of your botany; you only have \$5.82 in your hands for me instead of \$1482; you send down Journals, \$5⁰⁰ for me which makes the difference. Loveling will soon chalk me down for another vol. of "Proc. Am. Sci. Ass.", and Dr. Remond is getting up a Math. Journ. to which they will expect me to lend a helping hand in the way of subscription, so that I foresee that the \$5.82 will soon vanish. But my days for subscribing and purchasing books are fast diminishing, for the cost of living is increasing, children are multiplying, and salary is stationary!! — The concluding portion of vol. iii of "Proceedings of Amer. Acad." has not arrived, — you told me "Send me a specimen."

I once before asked you to inform me if there were any other species similar to Eudelichia Syn. Crisp. and wrote also to Hedysarum to enquire, what were in catalogues and in sale, I should be apprised by you, so that you have had a double dose from me. You misunderstand me, hardly however. I do not want other species of Crispeae, but species of other families done touch but in the style of Eudelichia, that is not to bore enumeration with very slight descriptions like Loudon's Encyc. nor yet elaborate works with plates like Lambert's Flora Nov. Scotiæ or Lindley's Cryptidaceæ, which I believe is also illustrated by plates, but one that includes a whole family, with descriptions sufficiently characteristic, geog. dist. &c &c. of about the extent of Eud. Syn. Crisp. Of course Dec. Prod. is just what I want as far as it goes, but these numerous families yet untraced. Eud. Syn. Crisp. fills up no great gap for me. I want one also of Clusiaceæ, and of Papaveraceæ; of families not exogenous I want Cryptidaceæ & Filices especially. You mentioned Hooker's Flora, but from the number of vols. already issued without completing the family, it seems to be more elaborate and costly than

Eud. Syn. Crisp.

I had our Opuntias cut to send you sometime in Nov. but did not put them up; some I fear have been cut too long to take no more. Shall I have more cut and pack them off with the Crassulæ as I did for some additional to the package? I enclose for you seeds of Persicaria, and of Stuckenia a pubes., of last season, and hope they will suit your purposes in studying the development in germination.

I am almost weary of collecting and trifling over Smilax to make out S. Pseudochina as distinct from S. tenuirostris, and passing on to Trillium, I find almost as much trouble with Ellipticæ species plus Mitch. T. pusillum. What do you know of this last? I have seen nothing like it in our low country. It seems to me that recurvatum of peduncle varies much in this genus; possibly those with strictly recurved peduncle never have it erect, but those with erect peduncle, appear to have various degrees of inclination, due to strict recurvature in some individuals, and if this be correct, and the petals in their color vary from the usual purple or chocolate brown, or rose to a green, simulating sepals, then the number of species must be much reduced. T. viride Beck I should take to be a green variation of T. recurvatum Beck, and T. discolor to hold the same relation to T. fasciculatum, but I have not the original description of T. discolor at hand. T. Catesbeiae of Elliott's Herb. I regard as T. erythrocarpum with a recurved peduncle. The leaves are pretty decidedly obvate, and taper at the base to a distinct petiole, very unlike the rounded almost cordate base of some forms of T. erythrocarpum, but a large suite of specimens show such gradations from the ovate subulate forms to the obvate taper-based forms that I cannot tell where to end one series, or T. eryth. and begin another for T. Catesbeiae. T. cernuum L. and T. stylorum Nutt (= T. venustum etc = T. cernuum Nutt) are pretty well distinguished by their elongated acute or acute rays, and strongly re-

curved peduncle, I have not yet seen a plant that I would decidedly ^{refer} either of
these species, that had a peduncle disposed to be erect, or moderately inclined.
T. erectum & *T. grandifl.* I distinguish by the form of the leaves, barely sessile, and by
their short ovary; the former I distinguish by its short subglobular dark-colored
(when dry) ovary, with short recurved stigmas, the latter by short subconic ovary
lighter colored (whitish) with rather longer stigmas, but there are specimens
partaking of the shades of character of each that I find difficult to refer with
precision, and I am disposed to go back to the ~~earlier~~ arrangement under
one species. The peduncles in each, vary in length from $\frac{1}{2}$ length of leaves to the
length greater than three of leaves to the tip of the acumination, also in
degree of inclination or declining from strict erect state. *T. pendulum* of
Willd. I take to be one of these, with recurved peduncle as a variation. Elliott's
specimens of marked T. erythro-, and which he appears to have used in his descrip-
tions are certainly either *T. erectum* or *T. grandifl.* just between them. *T. undulatum*
of Kun in Ell. I should take to be *T. erythro-*, with sessile leaves, and *T. purpureum* Kun.
in Ell. to be *T. erectum* with recurved slender peduncle. *T. nivea* Donor not known,
from whom can I get it? *T. novissimum* Ell. has priority I think over *T. stylorum*
Willd., but he unfortunately does not mention the marked characteristic the
distinct style, and did not perceive its identity with *T. cornuum* Mich.
If you do not bring up some considerations that I have overlooked, my mind is
nearly made up on Tillaea.

In my late short vacation (April), I went to our most southern district
or county, you would call it, Beaufort, to put up a cabin formerly belonging to my
grand-mother Gen. C. C. Pinckney, and had an opportunity of making the acquaintance
of some new plants; one was Pinckneya pubescens, which I saw growing in
its most northern locality, and of which I had seeds; there was Pachycium
myrtinum also at its most northern limit. In consequence of my meetings
with this last, and other lace. I was induced to review our species of the old genus
Lace, and also those of Auchmonea (old genus) the two most troublesome ^{genia} of the Eri-
caceæ, and must persuade you to listen to some of my questions therein touching upon
Botanical and the older Flora. Your Manual is always a help and often a guide
for our Southern plants, but in the desire to afford full information on Structural Botany
you have limited the subject perhaps disproportionately. What have you done
with *V. album* Physe. L. elevation of Solander. On enquiring for the plant yielding the
"gooseberries" of the country people in vicinity of Table Rock S.C. was shown a lace.
two or three feet high, with large greenish white berries, which may be this species; I have
not the flowers however. A plant much like that but not so tall grows in our middle county.

What are V. ligustrinum Michx. & V. tenellum Ait.? varieties of V. pensylvanicum? What are L. decamerocarpum DC., L. diffusum DC., L. mariannum DC. of Watson's Deod. Britt. quoted in D.C. Prod.? Have you ever received from the south the plant named by Elliott, referred "with much hesitation" to L. myrsinoides? This L. myrt. belongs to Labrador, I don't see it in your manual. I have overlooked L. galericans of bush and I do not find specimens in the herbaria about me which will help me to make it out; do you know it? What authority have you for saying L. carolinum the Farkleberry has "evergreen leaves"? Under Aucuba ligustrina, must you give no synonymous; are not A. floridosa Pursh, A. paniculata of Mex., and A. multiflora of D.C. all to be referred to A. ligustrina? Is A. floribunda of northern region the same as A. floribunda of south? What do you do with R. angustifolia? I have never seen any form of R. calyculata in our low country certainly, and take it to be a variety of R. calyculata (which I have collected in our mountains,) but you do not give it as a synonyme.

In references to Willd. or Griseb. edition of Spec. Plantarum, I am often uncertain whether the species was really known to Linnaeus or not; what is the proper edition of Linn. to use for this purpose? his twelfth? in how many vols?

In examining and arranging Elliott's Herb. I find whole genera still wanting, such as Clerod., Sideroxylon &c. Are they yet somewhere at the north?

I have enquired for Palmetto fruit; they have fallen by the time, and possibly a small quantity may be gathered under the trees.

I was about closing my envelope when I recollect that Head did not sign my name, but I do not doubt, that you would not doubt who was the author of the letter.

Yours very truly
Lewis R. Gibbes